



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,261	09/17/2003	Krishna Kummamura	JP920030063US1	3403
7590	04/07/2006		EXAMINER LY, CHEYNE D	
T. Rao Coca IBM Corporation Almaden Research Center 650 Harry Road San Jose, CA 95120			ART UNIT 2168	PAPER NUMBER

DATE MAILED: 04/07/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)
	10/664,261	KUMMAMURA ET AL.
	Examiner	Art Unit
	Cheyne D. Ly	2168

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on ____.

2a) This action is **FINAL**. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 1-16 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 1-7 and 9-16 is/are rejected.

7) Claim(s) 1,5, and 8-10 is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on 17 September 2003 is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) All b) Some * c) None of:
1. Certified copies of the priority documents have been received.
2. Certified copies of the priority documents have been received in Application No. _____.
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 09-17-2003 .

4) Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ .
5) Notice of Informal Patent Application (PTO-152)
6) Other: *dictionary.com* (1-3).

DETAILED ACTION

1. Claims 1-16 are examined on the merits.
2. The IDS, filed September 17, 2003, has been considered.

OBJECTIONS

3. The claim listing, preliminary amendment filed September 17, 2003, is objected to because the claim listing contains other part of the amendment. The paper has been entered. However, all future correspondence must comply with 37 CFR 1.121.
4. Claims 1 and 5 are objected to because of the use of internal periods to denote steps. For example, claim 1 recites “a.”, “b.”, etc., which is not appropriate. It is noted that periods are used to indicate the end of the respective claims. Appropriate correction is required.
5. Claim 9 is objected to because line 2 recites “means a first...” wherein the term “means” has been interpreted as a typographical error because said term “means” has been deleted from the rest of the claim. Appropriate correction is required.
6. Claim 10, line 4, recites the limitation of “entity-context pair,” while, claim 15, lines 10-11, recites “entity context pair.” Applicant is required to correct the inconsistency use of hyphenation within the identified phrases.

CLAIM REJECTIONS - 35 U.S.C. § 112, SECOND PARAGRAPH

7. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 2-4, 10, 11, 15, and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

9. The relative limitation “more representative”, in claim 2, lines 5 and 6, is vague and indefinite due to lacking any metes and bounds as to what suitability characteristic is being evaluated in order to compare to less suitable attributes so as to evaluate what is “more representative”. The same issue is present in claim 16. Claims 3 and 4 are rejected for being dependent from claim 2.

10. Claim 10 recites the limitation of “with respect to each entity-entity pair” in line 4. There is insufficient antecedent basis for this limitation in the claim. It is noted that the previous steps recite “each identified context,” however; the entity context pair has not been previously identified for the classifying step. The same issue is present in claim 15, lines 10-11. Claim 11 and 16 are rejected for being dependent from claim 10 or 15, respectively.

CLAIM REJECTIONS - 35 USC § 102

11. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

12. Claims 1, 2, 5-7, 9, and 12 are rejected under 35 U.S.C. 102(b) as being anticipated by Vossen P. (2001) (Vossen hereafter).

CLAIMS INTERPRETATION

13. It is noted that Vossen does not explicitly disclose the limitation of “profiling.” However, as cited below, Vossen discloses the required steps for the claimed method, therefore, the disclosed method of Vossen has been interpreted as achieving the expected

results of the claimed method, “profiling an entity.” Further, Vossen discloses an example as directed to the entity of “technology” (page 3, column 1, last paragraph), which has been interpreted as a “profile” as disclosed by the instant specification (page 4, lines 19-21).

14. The cited disclosure of “topics” and “subtopics” (page 2, column 1, section 1.1) as defined by Dictionary.com has been interpreted as “contexts” as disclosed by the instant specification (page 4, lines 22-25).

BASIS OF PRIOR ART

15. In regard to claim 1, Vossen discloses a method of profiling an entity (page 3, column 1, last paragraph, and page 6, column 2, item 2) the method comprising the steps of:
 - a. Retrieving information from at least one information source using the entity as search criteria (page 2, columns 1-2, section 1.1).
 - b. Clustering the retrieved information to identify contexts related to the entity (page 1, column 2, lines 26-28, and page 5, column 2, section 3).
 - c. Retrieving information corresponding to each identified context from at least one information source (page 2, columns 1-2, section 1.1);
 - d. Selecting features from the information retrieved at steps a and c to identify concepts associated with the entity with each identified context (page 3, column 2, section 1.3, to page 4, column 1, last paragraph); and
 - e. Structuring the identified concepts within each context (page 3, column 2, section 1.3, to page 4, column 1, last paragraph, column 2, 2nd paragraph).

16. In regard to claim 2, Vossen discloses a set comprising concepts that are exclusive to the identified context (page 4, column 2, 2nd paragraph). Vossen specifically discloses “limiting the concepts to the particular context.”
17. In regard to claim 5, Vossen discloses the method of profiling an entity as cited above.
18. In regard to claim 6, Vossen discloses the contexts are identified by finding prominent nodes (page 4, column 1, last paragraph), that contain the entity, in an ontology (page 5, column 2, last paragraph) or taxonomy.
19. In regard to claim 7, Vossen discloses the contexts are identified by using at least one of synonyms, hypernyms (page 6, column 1, 2nd paragraph, and column 2, items 1-3), etc.
20. In regard to claims 9 and 12, Vossen discloses a system (page 1, column 1, Introduction section) for implementing the above cited method.

CLAIM REJECTIONS - 35 USC § 103

21. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.
22. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not

commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

23. Claims 3, 4, 10, 11, and 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Vossen P. (2001) (Vossen hereafter) as applied to claims 1, 2, 5-7, 9, and 12 above, and further in view of Pretschner et al. (1999) (Pretschner hereafter).
24. Vossen describes the limitations to claims 1, 2, 5-7, 9, and 12 as discussed above. However, Vossen does not describe the limitation of “the step of ranking the concepts with each set” or “presenting top ranked concepts within each set.”
25. Pretschner explores ways to incorporate user’s interests into the search process to improve the results (page 1, Abstract section). One of ordinary skill in the art at the time of the instant invention would have been motivated by the improvements described by Pretschner to improve the document retrieval method described by Vossen to improve the results.
26. In regard to claim 3, Pretschner describes the step of ranking the concepts within each set (page 395, columns 1-2, Improving Search Results section). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to use the ranking described by Pretschner to improve the search results of Vossell.
27. In regard to claim 4, Pretschner describes the step of presenting top ranked concepts within each set (page 395, columns 1-2, Improving Search Results section). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the

invention was made to use the ranking described by Pretschner to improve the search results of Vossell.

28. In regard to claims 10, 11, and 13-16, the claimed invention is obvious of the prior art as cited above. Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention was made to use the ranking described by Pretschner to improve the search results of Vossell.

CONCLUSION

29. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

- a. Xu et al., ACM Transactions on Information Systems, Volume 18, No. 1, January 2000, Pages 79-112.
- b. Liu et al., CIKM'02, November 4-9, 2002, McLean, Virginia, USA, pages 558-565.

30. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

31. Patent applicants with problems or questions regarding electronic images that can be viewed in the Patent Application Information Retrieval system (PAIR) can now contact the USPTO's Patent Electronic Business Center (Patent EBC) for assistance.

Representatives are available to answer your questions daily from 6 am to midnight (EST). The toll free number is (866) 217-9197. When calling please have your application serial or patent number, the type of document you are having an image problem with, the number of pages and the specific nature of the problem. The Patent Electronic Business Center will notify applicants of the resolution of the problem within 5-7 business days. Applicants can also check PAIR to confirm that the problem has been corrected. The USPTO's Patent Electronic Business Center is a complete service center supporting all patent business on the Internet. The USPTO's PAIR system provides Internet-based access to patent application status and history information. It also enables applicants to view the scanned images of their own application file folder(s) as well as general patent information available to the public.

32. For all other customer support, please call the USPTO Call Center (UCC) at 800-786-9199. The USPTO's official fax number is 571-272-8300.
33. Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. Dune Ly, whose telephone number is (571) 272-0716. The examiner can normally be reached on Monday-Friday from 8 A.M. to 4 P.M.
34. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tim Vo, can be reached on (571) 272-3642.

C. Dune Ly 
Patent Examiner
4/3/06